

BUILDING WORKFORCE CAPABILITY

DEVELOPING A RISK-BASED
COMPETENCY FRAMEWORK

BY ROBERT NEWHAM
WATER QUALITY OFFICER

9 SEPTEMBER 2026

Abstract

Mid-Western Regional Council (MWRC) is developing a risk-based competency framework to strengthen workforce capability and provide greater assurance that water and wastewater operators are competent to undertake the tasks required within their operational environment.

The project was undertaken as an **operational design and gap-analysis process**, informed by regulatory requirements, nationally recognised training packages, existing Council procedures, consultation with operational staff and the NSW *Competency Benchmark for Local Water Utility Operators*. The framework addresses a key limitation of traditional training registers: **completion of training or possession of a qualification does not necessarily demonstrate that an operator can safely and consistently perform a specific operational task.**

The framework combines nationally recognised training with Council-specific competency requirements and a risk-based task hierarchy. This enables training and competency pathways to be structured according to the complexity and consequence of the work being undertaken, while providing operators with transparent pathways for development and progression.

The project demonstrates how a local competency framework can bridge the gap between **training completion and demonstrated task competence**, while supporting operational assurance, workforce development and career progression.

Introduction

Local water utility operators undertake a broad range of activities across treatment plants, pump stations and water and wastewater networks. These activities carry risks to worker and public safety, public health, the environment, assets and continuity of essential services.

MWRC's competency project arose from a simple question: **how can Council demonstrate that an operator is competent to perform the work they are actually required to undertake?**

Traditional training registers provide useful information about courses completed and qualifications held, but they do not necessarily demonstrate that an operator can apply that knowledge to a particular task, piece of equipment or operating environment. The project therefore sought to develop something more than a training register: a practical system for identifying, developing and assuring **task-level competency**.

The framework is also intended to support workforce development. Operators should be able to understand where they currently sit, what competencies they have achieved, what remains outstanding and what is required to progress. This transparency provides a clearer connection between competency development, career pathways and the Council's broader employment and pay structures.

The framework was developed alongside the NSW *Competency Benchmark for Local Water Utility Operators*, using the benchmark as an important industry reference point while adapting its principles to the specific operational environment of MWRC.

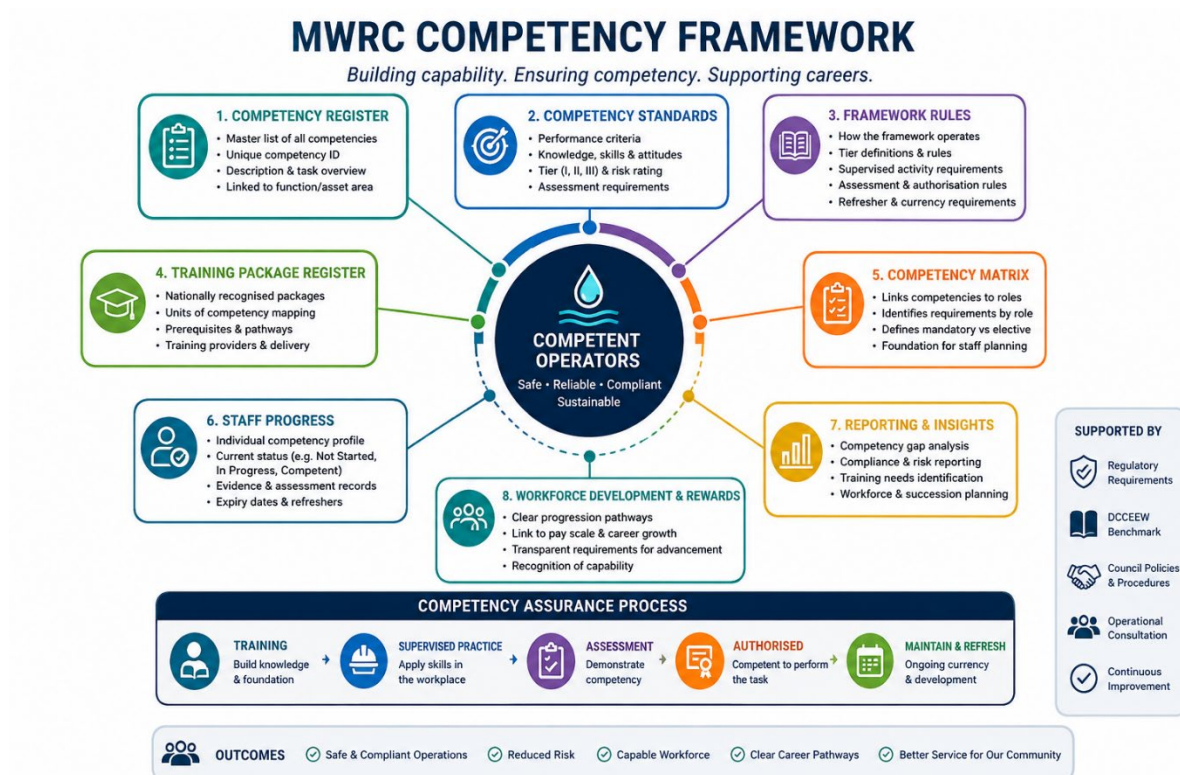


FIGURE 1: GRAPHIC SUMMARISING THE OVERALL GOALS OF THE COMPETENCY FRAMEWORK

Discussion

More than a training register

The central distinction within the framework is between **training completion** and **demonstrated competency**.

A qualification or completed training course provides evidence that an operator has undertaken a recognised learning program. It does not necessarily demonstrate that they can perform a particular Council task safely, correctly and consistently.

The framework therefore starts with the operational task rather than the employee's existing qualifications. Individual tasks are defined as competency standards, with the relevant knowledge, practical skills, training requirements and assessment requirements identified. This creates a direct connection between **what the organisation needs an operator to do** and **what the operator must demonstrate to be considered competent**.

The resulting system provides a more complete picture of workforce capability than a conventional training register, allowing Council to identify not simply who has undertaken training, but where demonstrated capability exists and where further development is required.

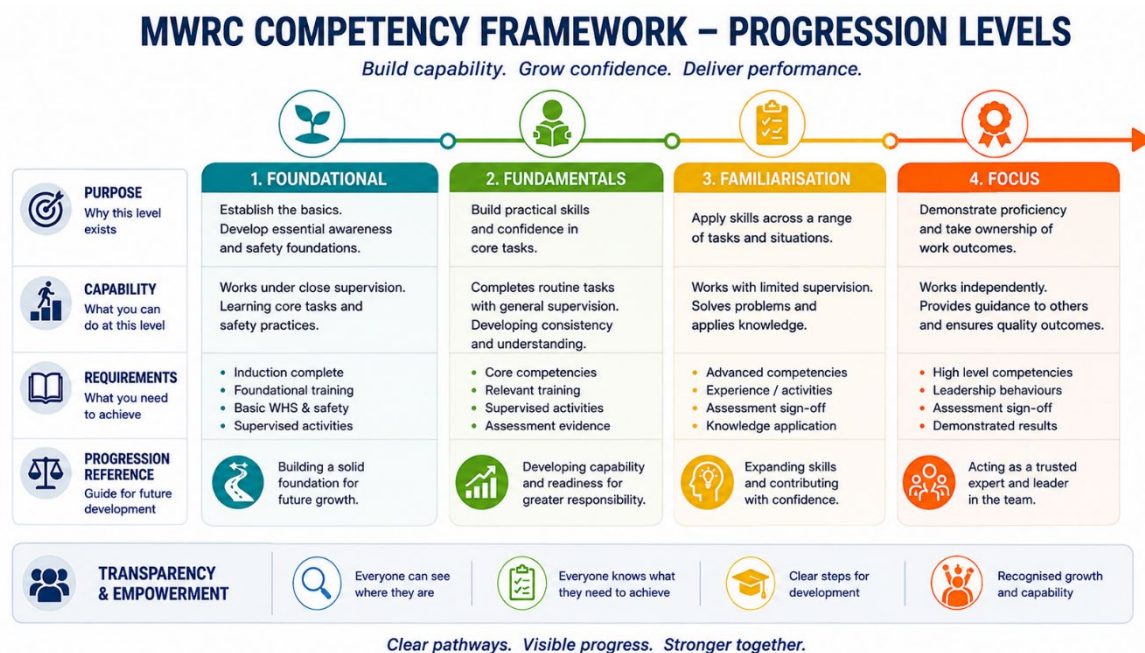


FIGURE 2: VISUAL GUIDE TO THE 4 PROGRESSION LEVELS WITHIN THE FRAMEWORK

Risk-based competency pathways

A key feature of the framework is the use of a **risk-based task hierarchy**. Operational activities are considered against factors including personal and public safety, public health and environmental risk, and asset or service risk. Tasks are then classified into three levels according to their relative complexity and consequence.

This hierarchy provides the mechanism for determining how much competency development is appropriate for a particular task. Lower-risk activities require a simpler pathway, while higher-risk or more complex activities require additional training, supervised workplace experience and assessment.

The hierarchy also provides a logical structure for building competency pathways from nationally recognised training. Rather than assigning the same training expectations to every operator, relevant training can be selected according to the work they are required to perform.

For example, a sewer operator undertaking drain cleaning may require the nationally recognised **MSMSS00019 – Operate a drain cleaning system**, combined with Council-specific training covering the operation of the Jetta trailer, equipment inspection, safe operating practices and local procedures. The competency requirement is therefore

determined by the **task and its risk**, rather than by the existence of a generic qualification alone.

Working with the NSW competency benchmark

The *NSW Competency Benchmark for Local Water Utility Operators* provides an important foundation for the framework. It establishes broader expectations around the knowledge and skills required of local water utility operators, while MWRC's framework provides the mechanism for applying those expectations within its own operational environment.

The relevant nationally recognised packages form the foundation of individual competency pathways. MWRC-specific tasks and skills can then be overlaid to account for local equipment, processes, procedures and operating conditions.

This creates a complementary relationship rather than a separate or competing system. The benchmark provides the **industry-level foundation**, while the local framework translates that foundation into the specific competencies an operator must demonstrate in their workplace.



FIGURE 3: FRONT COVER OF THE DCCEEW COMPETENCY BENCHMARK DOCUMENT

Workforce development and transparency

The framework is intended to provide value beyond operational assurance. Position specific competency pathways provide operators with a clear view of their

development, including what they have achieved, what training or practical experience remains outstanding and what opportunities exist for further progression.

This transparency is important for both employees and management. Operators can take greater ownership of their development, while managers gain a clearer understanding of workforce capability and future training requirements.

The framework can therefore support workforce planning, succession planning and career development while providing a more objective basis for progression through the Council's employment structure. As the relationship between competency levels and pay progression is further developed, the framework provides the underlying evidence of the skills and capabilities associated with progression.

Implications and Conclusions

This project demonstrates a practical approach for local water utilities to move beyond training records towards **demonstrated, task-level competency assurance**. By combining an industry competency benchmark, nationally recognised training and locally defined requirements, the framework provides a flexible model that can be adapted to different operational environments, with training, supervision and assessment scaled to the risk and complexity of the work.

For regional utilities, this provides a practical link between workforce development and operational assurance, while giving employees clearer visibility of their capability and development pathways. Ultimately, the objective is to enable MWRC to demonstrate not simply what training an operator has completed, but what work they are **demonstrably competent and authorised to perform**.